

DETAILED ACTION

1. Applicants amended claims 23 and 33 in the amendment dated 1/08/2010.
2. Claims 23, 25, 27-33, 35, 37-42 and 44 are pending.

Response to Arguments

3. Applicant's arguments filed 01/08/2010 have been fully considered but they are not persuasive.

A. Applicants argue that Services Overview, Architecture Comparison and Grantges do not teach providing a set of modules separate from the Parlay gateway, the modules comprising services interfaces for said software applications, and acting as proxies on behalf of said software applications to perform requests for access to web services on the framework of said Parlay gateway on behalf of said software applications.

However, the examiner respectfully disagrees. Services Overview teaches a "Parlay Web Services Gateway - an intermediary between the Parlay Application Server and Parlay/OSA Gateway or other network element, providing a proxy function for the Parlay/OSA Framework capabilities that enable Web Services solutions to be deployed using intermediary servers...The Parlay Web Services Gateway may support any combination of Parlay Web Service Interfaces and Parlay X Application Interfaces...Behind the Parlay Web Services Gateway may be a Parlay/OSA Gateway..." (Pages 11-12, Sections 5.4). Thus the Parlay X interface modules on the Parlay Web Services Gateway is separate from the Parlay/OSA Gateway, and performs

Art Unit: 2447

proxy functions for the Parlay/OSA Framework. Therefore, applicant's arguments are not persuasive.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 23, 25, 28-33, 35, 38-42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Parlay Group, Parlay Web Services Overview, 10/31/2002, pages 1-21, http://web.archive.org/web/20030320124225/http://www.parlay.org/specs/ParlayWebServices-Overview1_0.pdf, ("Services Overview") in view of The Parlay Group, Parlay Web Services Architecture Comparison, 10/31/2002, pages 1-17, http://web.archive.org/web/20030320084322/http://www.parlay.org/specs/ParlayWebServices-ArchitectureComparison1_0.pdf, ("Architecture Comparison"), and further in view of Grantges (WO 01/45049 A1).

With regards to Claim 23, Services Overview teaches a method for providing access to Parlay X web services providing WSDL interfaces (i.e., Parlay X Application Interface – Parlay X is a set of high level application interfaces defined in WSDL. The Parlay Web Services Gateway may support Parlay X Application Interfaces, Page 11, Section 5.4, Figure 3), said services being deployed in the domain of a telecommunication operator (i.e., Parlay Web Services provides the interface definitions

and infrastructure definition for the use of Web Services within a telecommunications environment, Page 5, Section 3), by software applications comprising the steps of: providing a Parlay gateway permitting access to said Parlay X web services (i.e., Parlay X Application Interface – Parlay X is a set of high level application interfaces defined in WSDL. The Parlay Web Services Gateway may support Parlay X Application Interfaces, Page 11, Section 5.4), said Parlay gateway comprising a Parlay framework (i.e., A Parlay/OSA Service is provided through a Parlay/OSA Gateway, with the telecom network behind the gateway form the viewpoint of the Application. The application interface provided by the Gateway consists of the Parlay Framework interfaces and one or more Service Capability Servers (SCS), Page 9, Section 5.3), wherein said Parlay gateway is included in one or more servers deployed in the domain of the telecommunication operator (i.e., A Parlay/OSA Service is provided through a Parlay/OSA Gateway, with the telecom network behind the gateway..., Page 9, Section 5.3); providing a set of modules separate from the Parlay gateway, the modules comprising service interfaces for said software applications acting as proxies on behalf of said software applications to perform requests for access to web services on the framework of said Parlay gateway on behalf of said software applications (i.e., Parlay Web Services Gateway – an intermediary between the Parlay Application Server and Parlay/OSA Gateway or other network element, providing a proxy function for the Parlay/OSA Framework capabilities that enable Web Services solutions to be deployed using intermediate servers, Page 11, Section 5.4; Behind the Parlay Web Services Gateway may be a Parlay/OSA Gateway..., Page 12, Section 5.4; thus the modules of

the Parlay X web services can be separate from the Parlay/OSA Gateway; Figure 3 and Figure 6), wherein the modules are included in at least one of the one or more servers deployed in the domain of the telecommunication operator (i.e., A Parlay/OSA Service is provided through a Parlay/OSA Gateway, with the telecom network behind the gateway..., Page 9, Section 5.3). Services Overview does not explicitly disclose software applications deployed in third party administrative domains. However, Architecture Comparison does teach disclose software applications deployed in third party administrative domains (i.e., Applications, which access via Parlay the service interfaces provided by a network operator; the could be deployed in 3rd party administrative domains, Page 6, Section 11) in order to enable application developers to access telecom network capabilities through an open interface (Page 6, Section 4). Therefore, based on Services Overview in view of Architecture Comparison, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Architecture Comparison to the system of Services Overview in order to enable application developers to access telecom network capabilities through an open interface. Services Overview and Architecture do not explicitly disclose configuring the modules in said set for performing authentication, authorization, and execution requests on behalf of said software applications. Grantges does teach configuring the modules in said set for performing authentication, authorization, and execution requests on behalf of said software applications (i.e., the user-selected X.509 digital certificate is then sent to proxy server 34...If authenticated at this level, proxy server then sends the information..., Page 7, Lines 9-25; Thus

Art Unit: 2447

authentication is not conducted directly by the application, but by a proxy server (PXWS)) in order to provide a secure gateway for providing access from a client computer to one of a plurality of destination servers (Page 1, Lines 10-14). Therefore based on Services Overview in view of Architecture, and further in view of Grantges, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teach of Grantges to the system of Services Overview and Architecture Comparison in order to provide a secure gateway for providing access from a client computer to one of a plurality of destination servers.

With regards to Claim 25, Services Overview teaches the above disclosed subject matter. However, Services Overview does not explicitly disclose the step of providing a further set of modules configured for implementing the behavior of said web services once said requests on said Parlay framework of said Parlay gateway have been performed on behalf of said software applications by the modules in said set. Architecture Comparison teaches the step of providing a further set of modules configured for implementing the behavior of said web services once said requests on said Parlay framework of said Parlay gateway have been performed on behalf of said software applications by the modules in said set (i.e., Finally, the agreed parameters are signed, and the Framework returns to the Application the references to the requested Services. These are valid only for a single session of the Application. In addition, the associated behavior could be specialized according to the negotiated parameters, Page 7, Section 4) in order to enable application developers to access telecom network capabilities through an open interface. Therefore, based on Services Overview in view

of Architecture Comparison, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the teachings of Architecture Comparison to the system of Services Overview in order to enable application developers to access telecom network capabilities through an open interface.

With regards to Claim 28, Services Overview teach the step of providing a distributed processing mechanism enabling said modules in said set to interact with said Parlay framework in said Parlay gateway via said distributed processing mechanism (i.e., i.e., In fact, a single Parlay Gateway or Parlay Web Service Gateway may support both sets of WSDL interfaces simultaneously, or a combination of WSDL interfaces and CORBA interfaces (or other interface) simultaneously, Page 20, Section 9.1)

With regards to Claim 29, Services Overview teach that said distributed processing mechanism is CORBA (i.e., In fact, a single Parlay Gateway or Parlay Web Service Gateway may support both sets of WSDL interfaces simultaneously, or a combination of WSDL interfaces and CORBA interfaces (or other interface) simultaneously, Page 20, Section 9.1).

With regards to Claim 30, Services Overview teach the step of providing a respective distributed processing mechanism enabling said modules in said further set to interact with said Parlay framework in said Parlay gateway via said respective distributed processing mechanism (i.e., i.e., In fact, a single Parlay Gateway or Parlay Web Service Gateway may support both sets of WSDL interfaces simultaneously, or a combination of WSDL interfaces and CORBA interfaces (or other interface) simultaneously, Page 20, Section 9.1).

With regards to Claim 31, Services Overview teaches that said respective distributed processing mechanism is CORBA (i.e., In fact, a single Parlay Gateway or Parlay Web Service Gateway may support both sets of WSDL interfaces simultaneously, or a combination of WSDL interfaces and CORBA interfaces (or other interface) simultaneously, Page 20, Section 9.1).

With regards to Claim 32, Services Overview teaches the above discussed subject matter. However Services Overview does not explicitly disclose that the step of one of said software applications accessing a web services comprising the steps of: said software application subscribing a module in said further set corresponding to said web service and configuring the service properties of said subscribed module in said further set, wherein both said operations are performed by using the tools provided by said Parlay framework in said Parlay gateway. Architecture Comparison teach that the step of one of said software applications accessing a web service comprising the steps of: said software application subscribing to a module in said further set corresponding to said web service (i.e., In order to enable that the implementation of a Service that can be selected and returned to an Application by the Framework function, the Service must register itself to the Framework function (Figure 3): the Service invokes the Service Registration API after authentication and authorization steps. When the Service is selected by an Application, the Framework invokes the Service Factory Interface provided by the Service, getting the Service reference to be returned to the Application, which can then use it to access the Service, Page 8, Section 4) and configuring the service properties of said subscribed module in said further set, wherein both said

operations are performed by using the tools provided by said Parlay framework in said Parlay gateway (i.e., In the Parlay architecture, the Framework functions play a critical role. The principal functions provided by a Framework are: Secure, controlled and accountable access to the Services; Incremental introductions of new Services through the Service registration process; Management of the integrity of the whole Parlay/OSA system (i.e., Applications and Services), such as fault handling and load control, Page 8, Section 4) in order to enable application developers to access telecom network capabilities through an open interface. Therefore, based on Services Overview in view of Architecture Comparison, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Architecture Comparison to the system of Services Overview in order to enable application developers to access telecom network capabilities through an open interface.

The limitations of Claim 33 are rejected in the analysis of Claim 23 above, and the claim is rejected on that basis.

The limitations of Claim 35 are rejected in the analysis of Claim 25 above, and the claim is rejected on that basis.

The limitations of Claim 38 are rejected in the analysis of Claim 28 above, and the claim is rejected on that basis.

The limitations of Claim 39 are rejected in the analysis of Claim 29 above, and the claim is rejected on that basis.

The limitations of Claim 40 are rejected in the analysis of Claim 30 above, and the claim is rejected on that basis.

The limitations of Claim 41 are rejected in the analysis of Claim 31 above, and the claim is rejected on that basis.

The limitations of Claim 42 are rejected in the analysis of Claim 32 above, and the claim is rejected on that basis.

With regards to claim 44, Services Overview further teaches a computer readable medium encode with a computer program product loadable in the memory of at least one computer and including software portions (i.e., Services Host – the computer on which a Service is hosted. The application has no visibility to the host configuration, Page 10, Section 5.3).

6. Claims 27, 37 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Parlay Group, Parlay Web Services Overview, 10/31/2002, pages 1-21, http://web.archive.org/web/20030320124225/http://www.parlay.org/specs/ParlayWebServices-Overview1_0.pdf, ("Services Overview") in view of The Parlay Group, Parlay Web Services Architecture Comparison, 10/31/2002, pages 1-17, http://web.archive.org/web/20030320084322/http://www.parlay.org/specs/ParlayWebServices-ArchitectureComparison1_0.pdf, ("Architecture Comparison"), and Grantges (WO 01/45049 A1), and further in view of The Parlay Group, Parlay Web Services Application Deployment Infrastructure, 10/31/2002, pages 1-21, http://web.archive.org/web/20030320112944/http://www.parlay.org/specs/ParlayWebServices-ApplicationDeploymentInfrastructure1_0.pdf, ("Application Deployment").

With regards to Claim 27, Services Overview, Architecture Deployment and Grantges teach the above discussed subject matter. However Services Overview,

Art Unit: 2447

Architecture Deployment and Grantges do not explicitly disclose the step of defining at least one web service security protocol for ensuring secure interaction between said software applications and the modules in said set. Application Deployment Infrastructure teaches the step of defining at least one web service security protocol for ensuring secure interaction between said software applications and the modules in said set (i.e., In a Web Service deployment where a Parlay Web Service Gateway is the entity being bound to by the Parlay Application, the Parlay Web Services Gateway may implement a Parlay Framework using the Parlay Web Services Interfaces, or it may implement a Web security model...The security model must provide policies for both authentication and access control, and these policies may be very strict or lax, Page 11, Section 4.5.4) in order to provide developers with additional choices for how applications are built and deployed, and will provide Service Providers with a broader scope of market opportunity as they reach emerging markets that are being enabled for Web Services (Page 6, Section 3). Therefore, based on Services Overview in view Architecture Deployment and Grantges, and further in view of Application Deployment, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Application Deployment to the system of Services Overview, Architecture Deployment and Grantges in order to provide developers with additional choices for how applications are built and deployed, and will provide Service Providers with a broader scope of market opportunity as they reach emerging markets that are being enabled for Web Services (Page 6, Section 3).

The limitations of Claim 37 are rejected in the analysis of Claim 27 above, and the claim is rejected on that basis.

With regards to claim 44, Services Overview further teaches a computer readable medium encode with a computer program product loadable in the memory of at least one computer and including software portions (i.e., Services Host – the computer on which a Service is hosted. The application has no visibility to the host configuration, Page 10, Section 5.3).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SURAJ JOSHI whose telephone number is (571) 270-7209. The examiner can normally be reached on Monday to Friday, 7:30 AM - 5:00 PM.

Art Unit: 2447

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Hwang can be reached on (571) 272-4036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SJ/
Art Unit 2447
April 24, 2010

...
/Joon H. Hwang/
Supervisory Patent Examiner, Art Unit 2447